# **User Manual**

# HDTV-FIBER-4K60300TR

WolfPack 4K 60 Hz HDMI Over Fiber Extender with EDID, RS232, IR and CEC to 1,000 Feet



Version: V2.0.1

#### **Safety Reminder**

To protect the device and operating personnel from electrostatic discharge, you need to check and ensure that the device is grounding well before the device is powered on. Please observe the following when you install, use, maintain this equipment.



Make sure the device ground connection.

#### **Disposal Instruction (US)**

For better protection of our earth, please don't throw this electronic device into municipal trash bin when discarding.

To minimize pollution and ensure utmost protection of the global environment, please recycle the product. For more

information about the collection and recycling of Waste Electrical and Electronic Equipment (WEEE), please contact your local dealers.

#### Safety Instructions

- 1. Please read these safety instructions carefully.
- 2. Please keep this User Manual for later reference.

3. Please disconnect this equipment from connecter before cleaning. Don't use liquid or prayed detergent for cleaning. Use moisture sheet or cloth for cleaning.

- 4. Make sure the equipment is connected to the power source with the correct voltage, frequency, and ampere.
- 5. All cautions and warnings on the equipment should be noted.
- 6. Never pour any liquid into opening, this could cause fire or electrical shock.

7. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.

8. If one of the following situations arises, get the equipment checked by a service personnel :

- a. Liquid has penetrated into the equipment.
- b. The equipment has been exposed to moisture.
- c. The equipment has not work well or you can not get it work according to user' s manual.
- d. The equipment has dropped and damaged.
- e. If the equipment has obvious sign of breakage.

9. Ambient operation temperature: 0 ~ 45 degrees.

10. Risk of overheating! Don' t put operating/installing equipment inside too closed space, be sure the installation space at least 1 to 2 inches or 2 to 5 cm of space for ventilation. To ensure that other objects do not cover the equipment.

#### **Notice: Peripheral devices**

Only peripherals (input/output devices, terminals, player, etc.) certified to comply with Class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

#### Caution

Changes or modifications not expressly approved by the manufacturer could void the user' s authority, which is granted by the Federal Communications Commission, to operate this equipment.

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# 1. Product Introduction

This WolfPack 4K 60 Hz HDMI Over Fiber Extender is an uncompressed HDMI2.0 4K60 Fiber Extender, the resolution can up to 4096\*2016@60Hz 4:4:4, the bandwidth is 18GBPS, the distance can up to 300 meters over one fiber cable, compatible with both single-mode and multi-mode fiber optic cable, the connector is using the LC type.

This WolfPack 4K 60 Hz HDMI Over Fiber Extender is using CWDM technology with 6 wavelength lasers The data rates of the 1270nm/1290nm/1310nm/1330nm lasers are 6Gb/s, these 4 CWDM lasers transmit the HDMI TMDS signal from TX to RX unit, The 1490nm/1550nm laser data rate is 1.25Gb/s, which transmit the EDID, HDCP2.2, IR, CEC and RS232 bidirectionally. This 4K60 Fiber Optic extender also supports the HDR and Dolby Vision.

# 2. Product Features

- Using the CWDM Single Fiber Technology.
- With 1270/1290/1310/1330/1490/1550nm DFB lasers inside
- Compliant with HDMI2.0, HDMI1.4, HDCP2.2
- > The distance up to 300 meters over one single-mode or OM3 multi-mode Fiber Cable
- Uncompressed resolution 4096x2160@60Hz/4:4:4, 18Gb/s(600M Hz pixel clock);
- 1xLC Fiber Connector;
- Bi-directional RS-232 and IR extension;
- Zero frame delay;
- Supports HDR and Dolby Vision.

# 3. Technical Details

	Parameter	Specifications
Resolution	4K60Hz	4096x2160@ 60Hz (4:4:4)
Components	Laser Diodes	1270/1290/1310/1330nm 10Gb/s CWDM DFB Lasers.
		1490nm/1550nm 1.25Gb/s CWDM DFB lasers
	Photo Diodes in Rx Module	1100nm~1620nm PIN Photo Detector
	WDM filter	1270nm/1290nm/1310nm/1330nm/1490nm/1550nm filter
Electrical	Input and Output Signals	TMDS Level (complying with HDMI2.0)
	Data Transfer Rate (Graphic Data)	Max. 10.0Gbps
	Maximum Video Bit Rate	18Gb/s
	Total Jitter at the end of Rx output	Max. 0.6UI
	Skew inter-channels	Max. 2ns
Optical	Link Power Budget	Min 8dB
Mechanical	Module dimension (mm)	162WX85LX26H
Connector	Optical Connector	1X LC connector
	Recommended Fiber Cable	OM3 MM Fiber or Single-mode Fiber
Extend Distance		300m

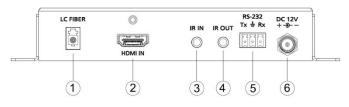
# 4. Packing Details

4K60 Fiber Optic Extender kit(one transmitter, one Receivers)	1 set
Power adapter DC12V 1A	2 pcs
User manual	1 pcs

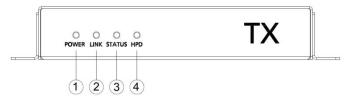
# 5. Panels

## TRANSMITTER:

#### Transmitter real Panel



### Transmitter Front Panel:

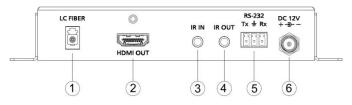


## ① 1 XLC Fiber Connector

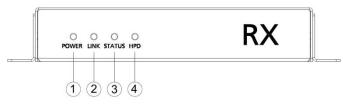
- 2 HDMI female Connector
- ③ IR IN
- ④ IR OUT
- ⑤ RS 232
- 6 DC +12V Power Supply
- 1 Power LED indictor
- ② Optical Signal Link LED indicator
- ③ HDMI Source connection LED indicator
- ④ HPD Signal LED indicator

# **RECEIVER:**

#### **Receiver Real Panel**

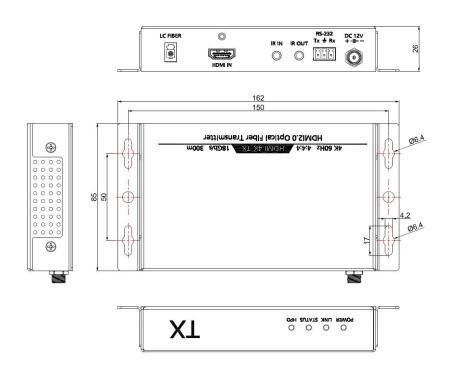


## **Receiver Front Panel**

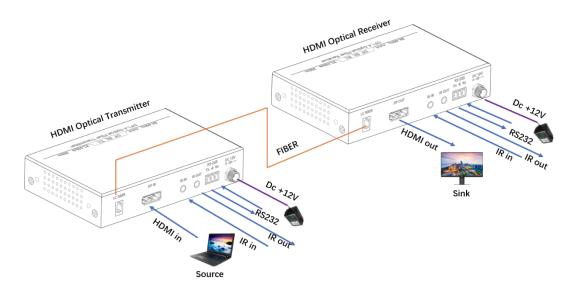


# **Product Dimensions**

- ① 1 XLC Fiber Connector
- 2 HDMI female Connector
- ③ IR IN
- ④ IR OUT
- ⑤ RS 232
- 6 DC +12V Power Supply
- 1 Power LED indictor
- ② Optical Signal Link LED indicator
- ③ HDMI Source connection LED indicator
- ④ HPD Signal LED indicator



# 6. Connection Diagram



## 7. After Sales

7.1 Warranty Information

The Company warrants that the process and materials of the product are not defective under normal use and service for 2 (2) year following the date of purchase from the Company or its authorized distributors.

If the product does not work within the guaranteed warranty period, the company will choose and pay for the repair of the defective product or component, the delivery of the equivalent product or component to the user for replacement of the defective item, or refund the payment which users have made.

The replaced product will become the property of the Company.

The replacement product could be new or repaired.

Whichever is longer, any replacement or repaired of the product or component is for a period of ninety (90) days or the remaining period of the initial warranty. The Company shall not be responsible for any software, firmware, information, or memory data contained in, stored in, or integrated with the product repaired by the customer's return, whether or not during the warranty period.

#### 7.2 Warranty limitations and exceptions

Except above limited warranty, if the product is damaged by over usage, incorrectly use, ignore, accident, unusual physical pressure or voltage, unauthorized modification, alteration or services rendered by someone other than the Company or its authorized agent, the company will not have to bear additional obligations. Except using the product properly in the proper application or normal usage